

**REMARKS**

After entry of this amendment, claims 1 - 16 are pending in the application. Claim 1 has been amended to address the objection to the claim. No claims have been canceled or been added. Reconsideration of the application as amended is requested.

In the Office Action dated September 30, 2004, the disclosure is objected to on various grounds. The informalities identified by the Examiner have been corrected by this Amendment. It is therefore submitted that the Examiner's objections to the disclosure are overcome.

Claims 1 and 14 stand objected to on various grounds. The informality identified by the Examiner with respect to claim 1 has been corrected by this Amendment. With respect to claim 14, the invention provides a lock bolt that reduces the likelihood of the bolt being urged out engagement with a steering column when a portion of the steering column acts as a cam and the lock bolt moves as a cam follower. As set forth in paragraph [0018], the surface of the second cone portion 50 can be angled to be less likely to cooperate in cam-cam follower relationship with the receiving portion 38. Surfaces having small angles of taper, such as shown in the drawings, can resist cam follower motion. With reference to Figure 2 of the application, a force acting on the surface of the second cone portion 50 would include a vector acting normal to the surface and a vector tangent to the surface. The tangent vector induces cam follower motion of the second cone portion 50 to the left of Figure 2. As the angle of surface of the second cone portion 50 decreases, the tangent vector component of the force decreases and the normal vector component increases, the force remaining unchanged with respect to direction and intensity. The decrease in the tangent vector directly results in a decreased cam follower motion inducing force. Also, the increase in the normal vector increases frictional forces between the receiving portion 38 and the second cone portion 50 which counter cam follower motion inducing forces. As a result, an angle of the surface can be chosen in response to the operating environment of the lock bolt such that the surface of the second cone portion 50 will not define a cam follower surface. It is therefore submitted that the Examiner's objections to the claim 14 is overcome.

Claims 1, 2, 6 - 11 and 13-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Elliot, U.S. Pat. No. 3,703,092. Figure 2 of the '092 patent shows a vertical line extending on the lock bolt 64 between the end of the tapered tip of the lock bolt 64 and the cylindrical body portion or "head end" 66 of the lock bolt 64, approximately midway along the tapered tip. It is respectfully submitted that the vertical line does not demarcate two cone portions differently angled from one another. A Declaration of James Jirik is being submitted with this Amendment to clarify the disclosure in the '092 patent. Mr. Jirik confirms that the vertical line does not demarcate two cone portions differently angled from one another. In addition to Mr. Jirik's Declaration, the drawing figures of the '092 patent do not show two cone portions differently angled from one another. The drawing figures show a single, straight line extending from the narrowed tip of the lock bolt 64 to the head end 66 of the lock bolt 64. It is therefore requested that the rejection be reconsidered and withdrawn.

Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Elliot in view of White, U.S. Pat. No. 3,638,462. As set forth above, Elliot et al. does not teach or suggest two different cone portions differently angled from one another and White et al. does not overcome this deficiency. Mr. Jirik's Declaration confirms that the vertical line extending on the lock bolt 58 between the end of the tapered tip of the lock bolt 64 and the cylindrical body portion of the lock bolt 58, approximately midway along the tapered tip, does not demarcate two two cone portions differently angled from one another. In addition, the drawing figures of the '462 patent do not show two cone portions differently angled from one another. The drawing figures show a single, straight line extending from the narrowed tip of the lock bolt 58 to the cylindrical body portion of the lock bolt 58. It is therefore requested that the rejection be reconsidered and withdrawn.

It is believed that this application now is in condition for allowance. Further and favorable action is requested.

Respectfully submitted,

**HOWARD & HOWARD ATTORNEYS, P.C.**

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**CERTIFICATE OF MAILING PURSUANT TO 37 C.F.R. §§ 1.1 AND 1.8**

I hereby certify that this **Amendment, Declaration Under 37 C.F.R. § 1.132**, and **return post card** are being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to **MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**, on **December 21, 2004**.

  
Brenda J. Hughes  
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